

WHAT IS CLAIMED IS:

1. Polyurethane-based one-component baking systems comprising one or more organic and/or inorganic compounds of vanadium in which the vanadium has an oxidation state of at least + 4.
5
2. The system according to Claim 1, wherein the compounds of vanadium are compounds selected from the group consisting of ammonium, lithium, sodium and potassium vanadate, lithium, sodium and potassium orthovanadate, magnesium vanadate, calcium vanadate, vanadyl(IV) acetylacetone (VO(C₅H₇O₅)₂), vanadyl bistetramethylheptadionate VO(TMHD)₂ and vanadic acid.
10
3. The systems according to Claim 1, wherein the compounds of vanadium are compounds selected from the group consisting of lithium vanadate Li₃VO₄, sodium vanadate Na₃VO₄, potassium vanadate K₃VO₄, lithium metavanadate LiVO₃, sodium metavanadate NaVO₃ and potassium metavanadate KVO₃.
15
- 20 4. The systems according to Claim 1, wherein the compounds of vanadium are lithium or sodium vanadate.
5. The systems according to Claim 1 comprising
 - (a) blocked polyisocyanates,
 - (b) polymers having polyisocyanate-reactive groups,
 - (c) one or more organic and/or inorganic compounds of vanadium in which the vanadium has an oxidation state of at least + 4,
 - (d) water and/or organic solvents or solvent mixtures and
 - (e) if desired, further additives and auxiliaries,
25

the amounts of (a) + (b) being from 20 to 89.9 parts by weight, (c) from 0.01 to 5 parts by weight, (d) from 10 to 70 parts by weight and (e) from 0 to 10 parts by weight and the sum of the parts by weight of components (a) to (e) being 100.

5

6. The systems according to Claim 5, wherein aliphatic isocyanates are used as blocked polyisocyanates (a).
7. The systems according to Claim 5, wherein aromatic isocyanates are used as blocked polyisocyanates (a).
8. The systems according to Claim 5, wherein polyisocyanates based on hexamethylene diisocyanate, isophorone diisocyanate, 4,4'-diisocyanatodicyclohexylmethane, their derivatives and/or mixtures are used as blocked polyisocyanates (a).
9. The systems according to Claim 5, wherein the polyisocyanates (a) are hydrophilicized.
- 20 10. The systems according to Claim 5, wherein salts of vanadic acid or condensation products thereof are used as vanadium compound (c).
11. The systems according to Claim 5, wherein lithium, sodium and potassium ortho- and metavanadate are used as vanadium compound (c).
- 25 12. A process for preparing the systems according to Claim 5, comprising introducing component (c) into components (a) and/or (b) prior to the dispersing or dissolution thereof in component (d).

13. A process for preparing the systems according to Claim 5, comprising introducing component (c) into component (d) prior to the dispersing or dissolution of component (a) and/or (b) in the same.
- 5 14. A process for preparing an aqueous or water-dispersible system according to Claim 5, comprising adding component (c) to one or more of components (a), (b), (d) and/or (e) before adding a dispersing quantity of water.
- 10 15. A method for preparing paints, inks and adhesives comprising adding one or more additives selected from the group consisting of pigments, fillers, levelling agents, defoamers, and catalysts other than (c) to the systems according to claim 5.
- 15 16. Substrates coated with coatings obtainable from systems according to Claim 1.
17. The systems according to Claim 2 comprising
 - (a) blocked polyisocyanates,
 - (b) polymers having polyisocyanate-reactive groups,
 - (c) one or more organic and/or inorganic compounds of vanadium in which the vanadium has an oxidation state of at least + 4,
 - (d) water and/or organic solvents or solvent mixtures and
 - (e) if desired, further additives and auxiliaries,
- 20 25 the amounts of (a) + (b) being from 20 to 89.9 parts by weight, (c) from 0.01 to 5 parts by weight, (d) from 10 to 70 parts by weight and (e) from 0 to 10 parts by weight and the sum of the parts by weight of components (a) to (e) being 100.

18. The systems according to Claim 3 comprising

- (a) blocked polyisocyanates,
- (b) polymers having polyisocyanate-reactive groups,
- (c) one or more organic and/or inorganic compounds of vanadium in which the vanadium has an oxidation state of at least + 4,
- (d) water and/or organic solvents or solvent mixtures and
- (e) if desired, further additives and auxiliaries,

5 the amounts of (a) + (b) being from 20 to 89.9 parts by weight, (c) from 10 0.01 to 5 parts by weight, (d) from 10 to 70 parts by weight and (e) from 0 to 10 parts by weight and the sum of the parts by weight of components (a) to (e) being 100.

10 15 19. The systems according to Claim 4 comprising

- (a) blocked polyisocyanates,
- (b) polymers having polyisocyanate-reactive groups,
- (c) one or more organic and/or inorganic compounds of vanadium in which the vanadium has an oxidation state of at least + 4,
- (d) water and/or organic solvents or solvent mixtures and
- (e) if desired, further additives and auxiliaries,

20 25 the amounts of (a) + (b) being from 20 to 89.9 parts by weight, (c) from 0.01 to 5 parts by weight, (d) from 10 to 70 parts by weight and (e) from 0 to 10 parts by weight and the sum of the parts by weight of components (a) to (e) being 100.

20. Substrates coated with coatings obtainable from systems according to Claim 5.